

## Abstract

The invention discloses a method of searching for devices automatically in a network. The method including the steps of: when two devices are interconnected, firstly searching, by a device initiating party, whether a resource management device exists in the network, if so, then sending a device searching request from the device initiating party to the resource management device, upon receiving the request, making a search, by the resource management device, among device registration information stored therein, after a device satisfying conditions is found out, information related to that device being immediately sent to the device initiating party, otherwise, informing the device initiating party that the information is not found; if not, announcing its own device information, by the device initiating party, to all other devices in the network, at the same time, monitoring announcement information of all the other devices, when receiving information of other devices, sending a connection request from the device initiating party to a device requiring connection, and completing corresponding operations after receiving a response. The method makes automatic searching and connecting with respect to each other among devices possible so as to facilitate the user's operation and improve automatic and intelligent performance of the network.

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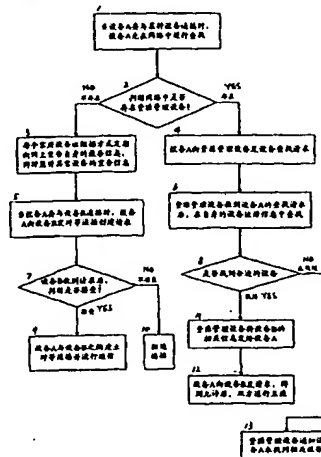
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(54) Title: A METHOD OF SEARCHING FOR THE DEVICES AUTOMATICALLY IN NETWORK

(54) 发明名称: 一种网络上设备间自动查找的方法



- 1... WHEN DEVICE A WANTS TO CONNECT WITH A CERTAIN DEVICE, DEVICE A SEARCHES IN NETWORK FIRSTLY
- 2... DETERMINE IF THERE IS A RESOURCE MANAGER?
- 3... EACH DEVICE BROADCASTS THEIR DEVICES' INFORMATION IN NETWORK IN A MULTICAST MODE AT A PERIOD OF TIME, AND MONITORS THE OTHER DEVICES' INFORMATION TO ISSUE
- 4... DEVICE A SENDS A REQUEST OF SEARCHING FOR THE DEVICE TO THE RESOURCE MANAGER
- 5... WHEN DEVICE A WANTS TO CONNECT WITH DEVICE B, DEVICE A SENDS A REQUEST OF PEER TO PEER CONNECTION TO DEVICE B, IT DETERMINES IF TO ACCEPT IT?
- 6... THE RESOURCE MANAGER SEARCHES IN ITS DEVICE REGISTRATION INFORMATION IN THE DEVICE AFTER RECEIVING A REQUEST OF SEARCHING FROM DEVICE A
- 7... AFTER DEVICE B RECEIVES THE REQUEST, IT DETERMINES IF TO ACCEPT IT?
- 8... HAVE BEEN SEARCHED FOR THE PROPER DEVICE?
- 9... A PEER TO PEER CONNECTION IS ESTABLISHED BETWEEN DEVICE A AND DEVICE B, AND COMMUNICATION IS START
- 10... REFUSE TO CONNECT
- 11... THE RESOURCE MANAGER SENDS THE RELATED INFORMATION OF DEVICE B TO DEVICE A
- 12... DEVICE A SENDS A REQUEST TO DEVICE B, THEN THEY COMMUNICATE WITH EACH OTHER AFTER BEING PERMITTED
- 13... THIS RESOURCE MANAGER INFORMS DEVICE A, IT HAS NOT FOUND THIS RELATED DEVICE

(57) Abstract: The present invention relates to a method of searching for the devices automatically in network, it comprises steps as follow: when two devices are interconnected, the device organiger firstly searches in network if there is a resource management device; the device organiger sends a request of searching for device to the resource manager The resource manager would lookup in the information of registered which stored in the device themselves, the resource manager will send the relation information to the device organiger after it found the device which had matched the condition ; otherwise it will inform the device organiger ; the device organiger would broadcast their information to the other all of the devices in network if there is not resource manager and monitor the other devices&apos; information of all . When receives the other devices&apos; i information the device organiger sends a connecting require to the device which need connected to and then finishes corresponding the operation . This method would realize to search and connect each other between the device in network automatically so that it is convenient to operate for user, and improve performance of intelligetize and automatization in network.

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